UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,202	01/26/2006	Andrew Timothy Boam	056258-5107	2377
, - <del>-</del>	7590 03/31/200 VIS & BOCKIUS LLP	EXAMINER		
1111 PENNSYLVANIA AVENUE NW			MCINTOSH III, TRAVISS C	
WASHINGTON, DC 20004			ART UNIT	PAPER NUMBER
			1623	
			MAIL DATE	DELIVERY MODE
			03/31/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/539,202	BOAM ET AL.				
Office Action Summary	Examiner	Art Unit				
	TRAVISS C. MCINTOSH III	1623				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 17 Ju	action is non-final. nce except for formal matters, pro					
Disposition of Claims						
4) ☐ Claim(s) 1-9 is/are pending in the application.  4a) Of the above claim(s) is/are withdraw  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-9 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or  Application Papers  9) ☐ The specification is objected to by the Examine  10) ☐ The drawing(s) filed on is/are: a) ☐ access applicant may not request that any objection to the original states.	r election requirement. r. epted or b)⊡ objected to by the B					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119		The state of the s				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 6/17/05.	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:	ate				

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by WO98/15581.

The '581 patent discloses methods of purifying nucleotides, nucleosides, and nucleotide sugars by contacting a feed solution containing the nucleotide or related compound with a nanofiltration or reverse osmosis membrane under conditions such that the membrane retains the nucleotide or related compound while a majority of the contaminant passes through the membrane. On page 8 the '581 document discusses the membranes used and the use of membranes having a molecular weight cut-off which are less than the molecular weight of the compound being purified, such as using membranes with molecular weight cut-offs of less than about 200 Da. On page 13, the pressure, flow rate and temperature of the filtration process is discussed for optimizing the method. Page 21 discusses the various nucleotides which are intended to be purified by nanofiltration, such as various phosphate nucleotides as well as the deoxy forms and other nucleotides. The prior art is seen to teach methods of purifying nucleotides of various structures with nanofiltration whereby the compounds are retained in the solution and the impurities are passed through the membrane, thus increasing the ratio of compound to impurity level in the solution after filtration.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TRAVISS C. MCINTOSH III whose telephone number is (571)272-0657. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia A. Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Traviss C McIntosh III/ Primary Examiner, Art Unit 1623 March 28, 2009